

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for the production of acrylic acid comprising:

a step of introducing a mixed gas containing propylene and molecular oxygen into a first reactor packed with a complex oxide catalyst having molybdenum and bismuth as essential components and oxidizing propylene and obtaining an acrolein-containing gas;

a step of introducing said acrolein-containing gas into a second reactor packed with a complex oxide catalyst having molybdenum and vanadium as essential components and obtaining an acrylic acid-containing gas;

and a step of introducing said acrylic acid-containing gas into an acrylic acid absorption column and causing it to contact an absorbent, wherein said absorbent is introduced into said acrylic acid absorption column at a mass flow rate in the range of 0.1 - 1.5 times the mass flow rate of propylene introduced into said first reactor, thereby obtaining an acrylic acid-containing solution in which

(a) said mixed gas for introduction into said first reactor having a propylene concentration in the range of 7 - 15 vol. % and a water concentration in the range of 0 - 10 vol. %, and

(b) said acrylic acid-containing solution obtained in said acrylic acid absorption column having a water concentration in the range of 1 - 45 wt. %.

Claim 2 (canceled)

Claim 3 (original): A method according to claim 1, wherein a main component of said absorbent is water.

Claim 4 (currently amended): A method for the production of acrylic acid comprising a step of introducing a mixed gas containing propylene and molecular oxygen into a first reactor packed with a complex oxide catalyst having molybdenum and bismuth as essential components and oxidizing propylene and obtaining an acrolein-containing gas, a step of introducing said acrolein-containing gas into a second reactor packed with a complex oxide catalyst having molybdenum and vanadium as essential components and obtaining an acrylic acid-containing gas, and a step of introducing said acrylic acid-containing gas into an acrylic acid absorption column and causing it to contact an absorbent, wherein said absorbent is introduced into said acrylic acid absorption column at a mass flow rate in the range of 0.1 - 1.5 times the mass flow rate of propylene introduced into said first reactor, thereby obtaining an acrylic acid-containing solution in which

(a) said propylene concentration of said mixed gas introduced into said first reactor being in the range of 7 - 15 vol. % and the water concentration in said mixed gas being in the range of 0 - 10 vol. %, and

(b) said water concentration of said acrylic acid-containing solution obtained in the acrylic acid absorption column being adjusted to a level in the range of 1 - 45 wt. % by adjusting the amount of an absorbent to be introduced.

Claim 5 (original): A method according to claim 4, wherein the amount of said absorbent to be introduced is 0.1 - 1.5 times the mass flow amount of propylene introduced into said first reaction zone.

Claim 6 (previously presented): A method for the production of polyacrylic acid comprising the step of polymerizing the acrylic acid obtained by the method set forth in claim 1.

Claim 7 (currently amended): A method for the production of polyacrylic acid comprising the step of polymerizing using the acrylic acid obtained by the method set forth in claim 3.